

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1-9 (canceled)

Claim 10 (new added) A method for building an wireless access point database comprising:

receiving data related to multiple wireless access points, wherein said data comprise identities of said multiple wireless access points; said identities are detected by a user; and a subset of said multiple wireless access points is unknown to said database;

deriving one or more proximity relationships between said multiple access points from said data, wherein a subset of said one or more proximity relationships is unknown to said database, wherein each proximity relationship represent the proximity relation between two wireless access points;

updating said wireless access point database according to said multiple wireless access point and said one or more proximity relationships, wherein the unknown subset of said multiple wireless access points is added to said wireless access point database, and wherein the unknown subset of said one or more proximity relationships is added to said wireless access point database.

Claim 11 (new added) The method of claim 10, further comprising:

retrieving the location-related information nearby said multiple wireless access points according to a search criteria; and

outputting said location-related information.

Claim 12 (new added) The method of claim 11, wherein said data comprising said search criteria.

Claim 13 (new added) The method of claim 10, wherein said updating said wireless access point database further comprises decreasing the trust to one or more wireless access points in said database, wherein said one or more wireless access points in said database are part of said multiple wireless access points referred by said data, and wherein one or more proximity relationships associated with said one or more wireless access points in said database conflict with said one or more proximity relationships derived from said data.

Claim 14 (new added) The method of claim 13, wherein said trust to each wireless access point in said database comprises a score, and the wireless access point with low score and its proximity relationship in said database classify as unknown to said database.

Claim 15 (new added) The method of claim 10, wherein said updating said wireless access point database further comprises increasing the trust to one or more wireless access points in said database, wherein said one or more wireless access points in said database are part of said multiple wireless access points referred by said data, and wherein one or more proximity relationships associated with said one or more wireless access points in said database agree with said one or more proximity relationships derived from said data.

Claim 16 (new added) The method of claim 15, wherein said trust to each wireless access point in said database comprise a score, and wherein a wireless access point with high score and its proximity relationship in said database classify as known to said database.

Claim 17 (new added) The method of claim 10, further comprising:

- selecting a representative partition of said multiple wireless access points;
- determining a representative location from the representative partition.

Claim 18 (new added) The method of claim 17, wherein said selecting representative partition is one or more of the following:

- the partition contains the largest number of close related wireless access points;
- the partition contains most trust wireless access points; and
- the partition contains last detecting wireless access point.

Claim 19 (new added) The method of claim 17, further comprising:

- retrieving the location-related information nearby said representative location in a geo-coded database according to a search criteria, and
- outputting said location-related information.

Claim 20 (new added) The method of claim 19, wherein said data comprising said search criteria.

Claim 21 (new added) The method of claim 17, wherein said determining said representative location is the location of a representative wireless access point in said representative partition or the average location of members in the representative partition.

Claim 22 (new added) The method of claim 21, wherein said representative wireless access point is either the last detected or the most trust wireless access point referred by said data.

Claim 23 (new added) The method of claim 21, further comprising:

retrieving the location-related information in a geo-coded database according to a search criteria,
wherein the location-related information is nearby said representative wireless access point or other wireless access point in said wireless access point database that has a close proximity relationship to said representative wireless access point either directly or indirectly; and
outputting said location-related information.

Claim 24 (new added) The method of claim 23, wherein said data comprising said search criteria.

Claim 25 (new added) The method of claim 10, wherein each proximity relationship between two wireless access points comprising one or more of the following properties:

a operation range overlapping condition;
a visiting order;
a traveling time; and
a distance.

Claim 26 (new added) The method of claim 25, wherein said proximity relationship associates with a traffic congestion information.

Claim 27 (new added) The method of claim 10, wherein deriving said proximity relationship is based on the wireless operation range overlapping condition.

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Claim 28 (new added) The method of claim 27, wherein said data further comprising the detecting time of each of said multiple wireless access points, and wherein deriving said one or more proximity relationships further based on said detecting time.

Claim 29 (new added) The method of claim 27, wherein said data further comprising the detecting order between said multiple wireless access points, and wherein deriving said one or more proximity relationships further based on said detecting order.